

Quiz B for 2:30 Class: 10/29/12

Name _____

Assume a firm has assets with a market value today of \$100,000 and outstanding bonds that mature five years from today for \$95,000. These bonds have a market value today of \$70,000. Assume that if these bonds were risk-free they would have a market value of \$85,000. Finally, assume you can buy or sell a put on the firm's assets for \$14,000. This put expires five years from today and has a strike price of \$95,000.

Note: Use a "+" for inflows and a "-" for outflows. If you do not show one or the other, I will assume you mean for the number to be "+".

- a. Given this information, what set of transactions today will generate an arbitrage profit? What is your profit today from these transactions?
- b. Show that the payoffs from the transactions you set up in part "a" sum to zero if the firm's assets have fallen to \$90,000 when the option expires five years from today.
- c. Show that the payoffs from the transactions you set up in part "a" sum to zero if the firm's assets have risen to \$110,000 when the option expires five years from today.

Wall Street Journal Questions are on the back of this page.